

Import / Export

Alberta has two interties, one with BC (rated capacity of 1,000 MW for export and 1,200 MW for import) and the other with Saskatchewan (rated capacity of 150 MW for both export and import). The actual operating capability of these interties is currently constrained by the limitations of transmission infrastructure within Alberta.

Alberta's Transmission Regulation mandates the AESO to restore the capacity of the existing interties to their rated capability. Our recent Long-term Transmission System Plan identifies future projects that achieve this requirement.

New interties are also called for under Alberta's Provincial Energy Strategy as additional renewable generation is expected, which is typically variable in output. Stronger interties enable excess wind energy to flow out of province during windy periods and energy to be imported during calm periods.

Interties increase diversity of supply and demand. Supply diversity is due to mixes of generation in different areas (for example, BC's supply is predominantly from hydro, Alberta's is predominantly thermal). Other conditions may affect generation in different areas (for instance, the wind may be blowing in one area and not in another, or unit outages may occur at different times in different areas). Demand diversity also exists but is not as pronounced.

RELEVANT FACTS

- Alberta has no interties with the USA although a 300 MW intertie with Montana has been proposed by an independent or merchant transmission company. Although regulatory approvals for the project have been received by the proponent construction of the line has not been initiated.
- Power flows in both directions on interties – typically flowing out of Alberta during periods of low demand (at night) and into Alberta during high demand periods.
- For the last 6 years, Alberta has been a net importer of power.
- Alberta's export of power has typically been about 1% of the power produced in Alberta. Imports have typically been about 2%.

From AESO's Long-term Transmission System Plan on page 303

Table 5.0-1: Import and export statistics from 2000 to 2007

Intertie statistics (MWh)	2000	2001	2002	2003	2004	2005	2006	2007
Imports on B.C. intertie	564,238	232,052	895,753	898,717	1,073,471	1,070,848	1,101,207	927,108
Imports on Sask. intertie	742,704	676,130	239,406	428,949	418,267	463,726	415,828	540,113
Total imports	1,306,942	908,182	1,135,159	1,327,666	1,491,738	1,534,574	1,517,035	1,467,221
Year-over-year growth (%)	-	-30.51	24.99	16.96	12.36	2.87	-1.14	-3.28
Exports on B.C. intertie	797,092	1,974,107	465,939	1,194,264	968,434	987,581	460,050	885,551
Exports on Sask. intertie	27,166	63,388	105,337	32,903	92,940	50,493	29,415	87,666
Total exports	824,258	2,037,495	571,276	1,227,167	1,061,374	1,038,074	489,465	973,217
Year-over-year growth (%)	-	147.19	-71.96	114.81	-13.51	-2.20	-52.85	98.83
Net yearly import (export)	482,684	(1,129,313)	563,883	100,499	430,364	496,500	1,027,570	494,004

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